(57) Abstract: This invention describes the new 11ß-long-chain-substituted estratrienes of general formula (I), in which R¹¹ is a long-chain radical that has a nitrogen atom and optionally a sulfur atom, which in addition can be functionalized in the terminal position with a perfluoroalkyl group or an optionally substituted aryl radical. The compounds have antiestrogenic or tissue-selective estrogenic properties and are suitable for the production of pharmaceutical agents.